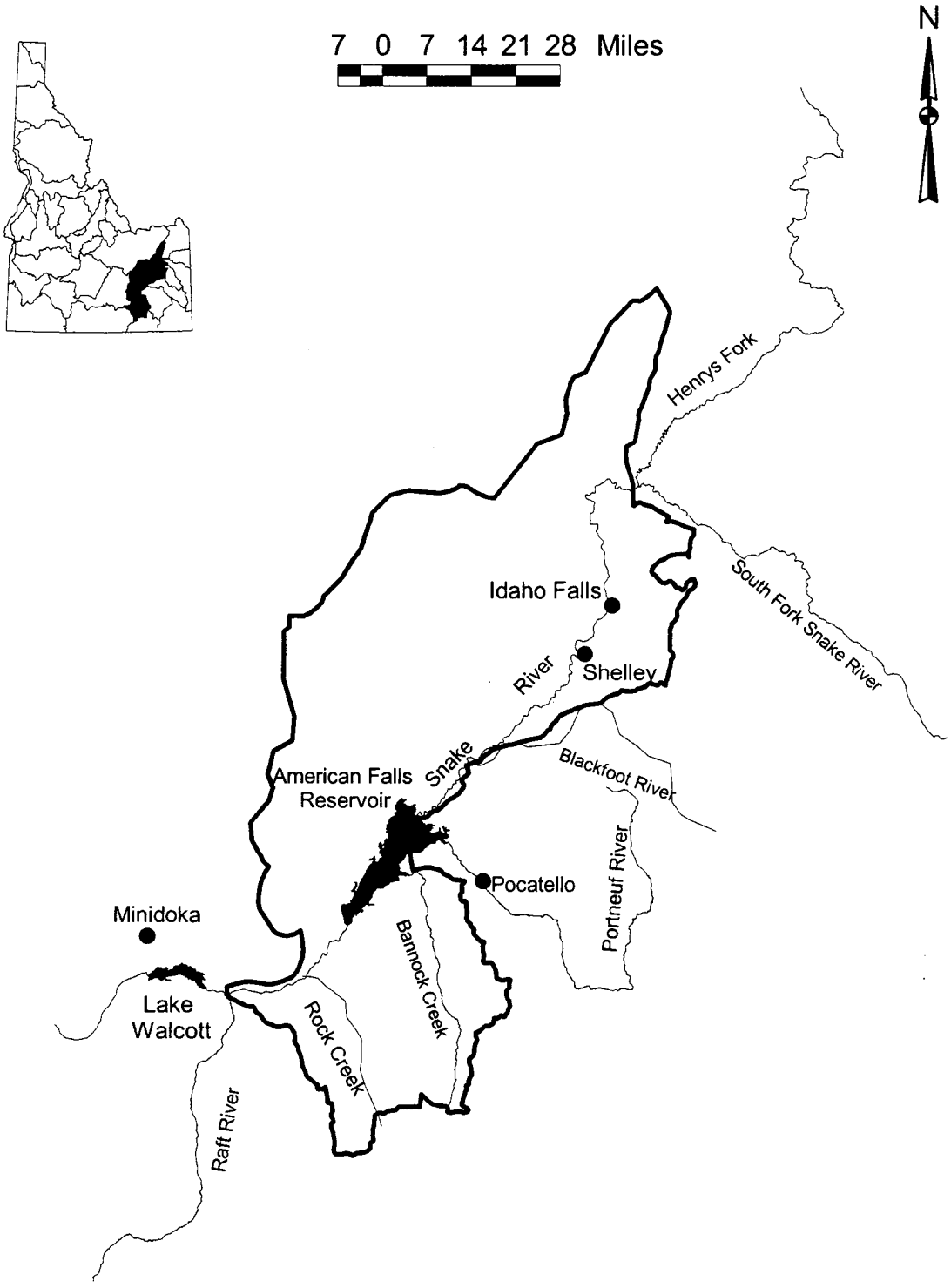
Snake River Drainage

Lake Walcott to Confluence of South Fork and Henrys Fork

25. SNAKE RIVER-LAKE



WALCOTT TO CONFLUENCE OF SOUTH FORK AND HENRYS FORK

A. Overview

The Snake River from Massacre Rocks upstream to the confluence of the North (Henrys) and South forks encompasses a variety of habitat types. This section extends approximately 125 miles, of which approximately 20 miles is flooded by American Falls Reservoir.

The six miles of river from Eagle Rock upstream to American Falls Dam is considered a Class 1 trout stream. In 1998, fishing effort was 63,555 hours for a catch of 34,066 fish of which 26,912 were trout. Almost all the trout were hatchery produced, with an estimated catch of only 238 wild cutthroat trout. This section is noted for trophy size trout; numerous trout taken were between 20 and 24 inches long. A fishing rule of six trout, of which only two may be over 16-inches long, was implemented in 1998 to reduce harvest on large trout. Fish and fish population size is dependent on the amount of water retained in American Falls Reservoir. Many of the large trout in the river reach were reared in the reservoir.

Some of the trout stocked in American Falls Reservoir annually migrate downstream in mid to late summer because the reservoir becomes too warm, may be drawn down too low and may lack sufficient oxygen. Reservoir releases in mid-summer sometimes result in high temperatures and low oxygen in the tailrace. Winter storage of water in the reservoir reduces river flows, placing additional stress on trout. During winter following heavy demand on stored water, the Bureau of Reclamation generally releases flows into the Snake River below American Falls Dam that are less than 5% of mean annual flow. Flows less than 10% of mean annual flow cause severe degradation to fishery resources.

American Falls Reservoir covers 58,078 surface acres and has a usable storage of 1,671,300 acre-feet. It is a popular fishing reservoir, with an estimated 26,000 rainbow trout harvested and 125,000 hours fishing during the season when water volume has been sufficient in previous years. During 1993, immediately following a six-year long drought, effort decreased to 69,000 hours and catch decreased to 8,000 trout. American Falls Reservoir is stocked annually with catchable trout in early May. Trout grow from 9-inches to 16-inches or more during the year following stocking. Most trout caught range in size from 1.5 to 3 pounds and most are of hatchery origin. Use of fingerlings stocked in the reservoir and river above were evaluated and found to be successful for developing a fishery. A smallmouth bass fishery developed in American Falls Reservoir during the 1995-2000 period. Department electrofishing surveys first documented numerous bass in multiple age classes in 1997. The first bass tournaments were held in 1999. Yellow perch has been present in American Falls Reservoir for decades. However, anglers rarely encounter large numbers of harvestable sized perch due to occasional several drawdown. American Falls Reservoir also contains an abundance of nongame fish, primarily Utah suckers, common carp, and Utah chubs. Over 90% of fish caught in gillnets in American Falls Reservoir are nongame fish. The newly established smallmouth bass fishery in American Falls Reservoir should benefit from this food source.

The Snake River from the backwaters of American Falls Reservoir upstream to Tilden Bridge, a distance of approximately 20 miles, is a Class 1 stream. The river in this area has limited public access because of private land and the Fort Hall Indian Reservation. Numerous springs arise on the reservation in the area known as the Fort Hall Bottoms located near the upper end of American Falls Reservoir and between the Portneuf River on the south and the Snake River on the north. The springs produce approximately 1,800,000 acre-feet of water annually, more than enough to fill American Falls Reservoir. The two largest of the reservation springs are Clear Creek (7 miles long) and Spring Creek (11 miles long). These are considered high quality spawning and rearing streams and are managed by the Shoshone-Bannock Tribes.

The Snake River flows 37 river miles from Tilden Bridge upstream to the Gem State Power Dam and runs through a mixed cottonwood riparian. Water is diverted from the river at numerous points in this reach. During the irrigation season and early fall, river flows vary depending on amount released from upriver storage and on amount diverted at each canal. Research conducted in 1987 and 1988 documented catch rates of 0.08 to 0.25 trout/hour between American Falls Reservoir and the Gem State Dam. Hatchery rainbow trout comprised the majority of the catch. However, large wild rainbow trout, brown trout, and cutthroat trout also are caught in this reach. Research recommended increased supplemental stocking of fingerling brown and cutthroat trout to capitalize on high growth rates in this recruitment limited river reach. Large numbers of rainbow trout and brown trout have been stocked in that reach since 1991 and the fisheries in the river and reservoir below have improved. After initiation of the fingerling-stocking program in this river reach, catch rate was documented at 0.35 trout/h in 1992. Since 1999 brown trout have not been stocked.

This river reach is most easily accessed by boat as there is very little public access along the shore. Additional access for boat and bank anglers would enhance the value of this fishery.

Reservoirs and ponds along the Snake River in this area include Springfield Reservoir, McTucker Ponds, and Rose Pond. Springfield Reservoir covers 66 surface acres and is kept full during summer to facilitate water flow into irrigation canals. Due to excessive predation by birds, mainly double-crested cormorants, fish stocking and fishing rules were changed in 1998. A decreased number of larger trout (16 to 17 inches long) are stocked now and stocking time is in late October when most of the migratory fish-eating birds have migrated south. Anglers may keep only two trout, which must be at least 20-inches long and only artificial flies or lures are allowed. This change has been opposed by some anglers and highly endorsed by others. Angling pressure has increased as compared to the year immediately prior to the change. McTucker Ponds are eight small gravel pits covering a total of 25 surface acres. These ponds are located near the upper end of American Falls Reservoir on the northwest side of the Snake River and are stocked with catchable size trout. Largemouth bass, bluegill, and channel catfish were stocked there in 1993, but high water in 1997 connected the McTucker Ponds with the Snake River. This brought nongame fish species from the Snake River and most of the stocked warmwater fish probably left. Rose Pond is located north of Blackfoot and contains rainbow trout, bluegill, and largemouth bass. In 1997 it connected with the Snake River and now contains nongame fish. The pond is reduced from over 20 surface acres in summer to less than three shallow acres in winter as the ground water level recedes. Therefore very few trout survive the winter

The Snake River from the Gem State project to the outflow of the upper Idaho Falls Power Plant is primarily a put-and-take hatchery rainbow trout fishery. The Department and the

City of Idaho Falls stock this reach with hatchery catchable rainbow trout. Hatchery rainbow trout provide the majority of the catch in this reach but wild cutthroat trout, rainbow trout and brown trout are also important components of the fishery. The hydropower impoundments in this section block upstream migration of spawning trout and provide less productive trout habitat than run of the river reaches. This section will be managed for optimum return to the creel of catchable rainbow trout.

The remainder of the upper Snake River from the Idaho Falls Upper Power Plant to the confluence of the Henrys Fork and South Fork (39 miles) produces occasional catches of large rainbow trout and cutthroat trout. Brown trout are also caught in this reach. No hatchery stocking occurs above the upper power plant pool. The fishery in this area has declined since the Teton Dam failure due to silt deposition and loss of habitat. Little improvement has been noted in recent years. Because of hatchery space limitations and very poor return to the creel in this fishery, this river reach will not receive catchable hatchery trout. We will attempt to supplement natural production with fingerling cutthroat trout as our hatchery production allows.

Reservoirs and ponds along the Snake River in this area supporting fisheries include Roberts Gravel Pond and Market Lake, both of which are owned by the Department. Roberts Gravel Pond covers 35 surface acres and is managed with catchable rainbow trout. Artificial aeration during winter periods has offset past winter kills in Roberts Gravel Pond. Market Lake WMA water channels contain yellow perch, bullhead catfish and Utah chubs. The Market Lake WMA waterfowl marsh has been renovated into new management units connected by newly dredged canals. These canals provide the majority of fish habitat at Market Lake and should improve fishing opportunities for yellow perch and bullhead catfish. During drought conditions angling opportunities at Market Lake are severely limited. It is managed as a mixed fishery.

The Snake River from American Falls Reservoir to the confluence of the Henrys Fork and South Fork has undergone much change in trout habitat quality that limits our ability to provide improvements in quality and quantity of trout angling opportunity. Alternate species management may provide the best and most cost effective means to improve fishing in this portion of the river. Smallmouth bass especially perform well in this type of river habitat. The Department has introduced smallmouth bass in the Idaho Falls area impoundments. Experience in similar river reaches in Idaho and Oregon has shown that smallmouth bass are compatible with both resident and anadromous salmonids.

B. Objectives and programs

1. Objective: Maintain and improve the newly developed smallmouth bass fishery from Lake Walcott to American Falls Dam.

   Program: Advise angling public of the opportunity and ascertain public support for quality bass rules.

   Objective: Look for opportunity to restore Yellowstone cutthroat trout.

   Program: Improve spawning and rearing habitat in tributaries to this river reach.

2. Objective: Maintain quality trout fishery from Eagle Rock to American Falls Dam.

Program: Seek improved minimum flow. Biologically, a minimum flow of 20% (1,791 cfs) of the mean annual flow would be appropriate in this reach. However water managers currently reduce winter flow to as low as 300 cfs during low water years to maximize potential of reservoir refill.

3. Objective: Maintain boating access and an adequate minimum conservation pool in American Falls Reservoir.

   Program: Work with the Bureau of Reclamation, Department of Water Resources and Bonneville Power Administration to obtain a minimum conservation pool of 340,000 acre-feet (20% of full-pool). This level would keep at least one boat ramp accessible for anglers and maintain enough depth and surface area to reduce entrainment loss of trout and bass. This level would also minimize water quality impacts from sediment entrainment. This volume would also maintain some rocky habitat to encourage smallmouth bass to stay in the reservoir.

   Objective: Increase catch rate to 0.3 trout/hour.

   Program: Increase number of fish stocked by decreasing average size.

4. Objective: Protect and restore wild cutthroat trout in the Snake River from headwaters of American Falls Reservoir to Gem State Dam.

   Program: Advise angling public of the opportunity and ascertain angler's interest in closing harvest to cutthroat trout while maintaining current limit on rainbow trout and brown trout.

5. Objective: Create dependable warmwater fisheries in McTucker Ponds.

   Program: Work with Bingham County to create a berm around the McTucker Ponds to prevent flood-plain flows from entering the ponds and contaminating them with nongame fish.

   Program: Renovate the eight McTucker ponds with rotenone and restock with largemouth bass and bluegill.

DRAINAGE: Snake River-Lake Walcott to Confluence of South Fork and Henrys Fork					
Water	Miles/acres	Fishery			Management Direction
		Type	Species present	Management	
Snake River from eastern boundary of Minidoka Wildlife Refuge to Eagle Rock	8/	Mixed	Rainbow trout Brown trout Smallmouth bass Cutthroat trout	General	Assess status of the fishery including status of recently introduced channel catfish, smallmouth bass, and sturgeon.
Snake River from Eagle Rock to American Falls Dam	7/	Mixed	Rainbow trout Brown trout Cutthroat trout Smallmouth bass Sturgeon	Put-and-grow trout and sturgeon Quality wild cutthroat trout	Develop a fishery management plan for the reach consistent with research findings and public input. Maintain quality trout rules, maintain sturgeon population and assess public's interest in quality bass rules.
American Falls Reservoir	/56,000	Mixed	Rainbow trout Cutthroat trout Brown trout Smallmouth bass	Put-and-grow trout Rainbow trout. Natural reproduction of other species	Develop a fishery management plan using research findings and public input.
Rock Creek and tributaries	55/	Coldwater	Cutthroat trout Rainbow trout	Quality General	Develop angler access. Work with other agencies to minimize grazing impacts through NRCS programs
Springfield Lake	/66	Coldwater	Rainbow trout	Put-and-grow trout	Assess public support and potential partners to increase water depth.
McTucker ponds	/10	Mixed	Rainbow trout.	Put-and-take trout	Seek funding for a berm around the ponds that will separate the ponds from the Snake River.
Rose Pond	/5	Mixed	Rainbow trout.	Put-and-grow trout	Work with county and state highway Departments to deepen ponds. Frequent connection with the Snake River preclude warm water fish management.
American Falls Reservoir to Gem State Dam	57/	Coldwater	Cutthroat trout Brown trout Rainbow trout Mountain whitefish	Quality Wild trout Put-and-grow trout	Increase catch rate for all trout to 0.5 fish/hour. Rely on hatchery rainbow trout and brown trout fingerling recruitment.
Gem State Dam to outflow of Idaho Falls upper power plant	12/	Coldwater	Rainbow trout Brown trout Whitefish Cutthroat trout	General Quality	Maintain catch rate for all trout to 0.5 fish/hr. Stock catchable rainbow trout. Monitor smallmouth bass populations.

Idaho Falls upper power plant to South Fork	39/	Coldwater	Cutthroat trout Brown trout Rainbow trout Whitefish	Quality General	Upper Snake Region cutthroat trout restricted harvest. Improve angler boat access. Manage for catch rates of 0.5 fish/hour for all trout. Rely on natural recruitment with experimental supplemental stocking of cutthroat trout fingerlings. Monitor smallmouth bass populations.
Roberts Gravel Pond	/35	Coldwater	Rainbow trout	General	Catchable rainbow trout stocked in spring and fall.
Market Lake	/545	Warmwater	Yellow perch Bullhead	General	Work with habitat managers to maintain warmwater fishery. Emphasis on yellow perch.
Spring Creek, Taylor, Bannock, Jim and Texas sloughs	33/	Coldwater	Rainbow trout Cutthroat trout	General Quality	Put-and-grow fishery, Maintain catch rates of 0.5 fish/hr. Conduct spot creel checks to assess catch rate, effort, and size. Maintain supplementation with cutthroat trout and rainbow trout fingerlings.